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REMARKS / ARGUMENTS

In the specification, the three paragraphs having informalities to which an objection was raised (on pages 16, 20 and 23) have been amended to correct the informalities.

In response to the Office Action, Applicant has amended claims 101 to 109 and has added new claim 117, while claims 1 to 100 and 110 to 116 are canceled.

The amendment made to claim 101 is supported by the specification and claims as originally filed. Specifically, from page 10 (line 31) to page 11 (line 2), the positioning device for guiding the at least partially coated end of the fibre into position within the animal or animal tissue is discussed. Later at page 12 (lines 4 to 15), the embodiments wherein the positioning device may comprises a catheter or a micropositioning stage capable of moving the fibre in x-y-z positions, are discussed in detail. Further discussion of the positioning device can be found at page 13 (lines 11 to 14). Figure 1 illustrates an embodiment of the invention that can be used with a positioning device, wherein the fibre is attached to a handle (8) for movement and to promote positioning, for example within a catheter. Figure 7 illustrates a positioning device having a positioning stage (50) to which a system under study would be attachable, and that allows precise positioning of the system under study. There is discussion of the positioning device at page 21, lines 8 to 10. As discussed on page 31, Figure 15 illustrates a positioning device that may be used with a plurality of fibres. Other passages in the description also support the amendment made to claim 101.

The amendment made to claim 108 simply clarifies that the catheter is a component of the positioning device, and is attachable to the animal or animal tissue under investigation.

The claims have been amended in the preamble to include the term "sampling" prior to the term device, so as to differentiate between the device (now the sampling device) and the positioning device.

New claim 117 has been added to the application and is supported by passages of the text that discuss the positioning device as a stage, capable of movement in the z direction, in order to position the fibre downward into the system under investigation. See for example, original claim 66, Figure 7 and descriptions thereof, page 12 (line 6), page 19 (line 16), page 21 (line 8), or page 31 (line 19), among other passages.

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Claim rejection under 35 USC §112

To traverse the objection raised to claim 110, this claim has been canceled.

Claim rejections under 35 U.S.C. §102

To traverse the objection raised to claims 101, 107, 109 and 110, independent claim 101 (from which all other claims depend) has been amended to include further details of the positioning device that are not disclosed in the cited prior art U.S. Patent No. 5,691,206 (the '206 patent). In particular, independent claim 101 now includes the limitations that the positioning device has: (a) an attachment region, and (b) a fiber holding region. The attachment region is attachable to the animal or animal tissue under investigation and is used to immobilize the positioning device with respect to the animal or animal tissue. The fiber holding region is also a component of the positioning device and is physically attached to the fibre, as well as being movable with respect to the fibre holding region. This allows the positioning device to move the coated end of the fibre into or out of the animal or animal tissue under investigation.

The cited '206 patent may in fact teach a hollow needle through which a fibre can be inserted, but the needle is not attachable to an animal or animal tissue, as is now stipulated in claim 101. The human investigator inserting the hollow needle into the system under investigation is required to insert the needle and position the fibre. Of course, such activities are labor intensive, time consuming and not adequately repeatable, as replication would depend on whether the investigator is capable of inserting the needle into the system under investigation in an identical location for a subsequent sampling.

The prior art reference of Fretot et al., 1997 is alleged to anticipate previous claims 101, 107, and 110. It is believed that with the amendment of claim 101 and the cancellation of claim 110, the invention has been distinguished from the teachings of Fretot et al., which simple teaches the use of a coated fibre within a hollow needle. Advantageously, the positioning device as now defined in claim 101 as amended is attachable to the system under investigation, and does not rely on the skill of an investigator to re-insert a needle into a system under investigation in order to sample consistently.

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Claim rejections under 35 U.S.C. 103(a)

The objection raised to claim 108 on the ground of obviousness in view of the combined teachings of the '206 patent and Fretot et al., with the additional teachings of Van Bockel still does not allow a skilled artisan to arrive at the invention as now claimed in claim 108. It is now clear that the positioning device must meet the limitations included in claim 101, and that a catheter is a component of the positioning device. Simply because Van Bockel uses a catheter in a completely unrelated field, specifically, the device of Van Bockel is for positioning in an aneurysmal sac in an artery between the wall of the artery and the wall of an endoprosthesis. The device has a pressure sensor and transducer for wirelessly transmitting data available from the pressure sensor, but does not involve a coated fibre, and the positioning system does not meet the limitations now included in claim 101, specifically because a holding region for holding a coated fibre is not included.

The objection raised to claims 102 and 103 on the ground that these claims are rendered obvious in view of the '206 patent and Fretot et al., with the additional teachings of Basta (US 6,730,096) has been traversed with the amendment to claim 101, as the combined teachings of these references does not allow a skilled artisan to arrive at the invention as now claimed in claims 102 and 103. Basta does not allow a skilled artisan to arrive at the invention as now claimed in claim 102 and 103, specifically with respect to an attachment region and a holding region for holding a coated fibre.

The objection raised to claim 106 on the ground that this claim is rendered obvious in view of the '206 patent and Fretot et al., with the additional teachings of Quay et al. (US 6,287,521) has been traversed with the amendment to claim 101, as the combined teachings of these references does not allow a skilled artisan to arrive at the invention as now claimed in claim 106. Quay et al. does not allow a skilled artisan to arrive at the invention as now claimed in claim 106, specifically because neither an attachment region nor a holding region for holding a coated fibre is taught.

The objection raised to claim 104 on the ground that this claim is rendered obvious in view of the '206 patent and Fretot et al., with the additional teachings of Colburn et al. (US 2003/0183758) has been traversed with the amendment to claim 101, as the combined teachings of these references does not allow a skilled artisan to arrive at the invention as now claimed in claim 104. Colburn et al. does not teach anything to allow a skilled artisan to arrive

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at the invention as now claimed in claim 104, specifically because neither an attachment region nor a holding region for holding a coated fibre is taught within a positioning device.

The objection raised to claim 105 on the ground that this claim is rendered obvious in view of the '206 patent and Fretot et al., with the additional teachings of Riviere et al. (US 2003/0183758) has been traversed with the amendment to claim 101, as the combined teachings of these references does not allow a skilled artisan to arrive at the invention as now claimed in claim 105. Riviere et al. does not teach anything to allow a skilled artisan to arrive at the invention as now claimed in claim 105. Neither an attachment region nor a holding region for holding a coated fibre is taught within a positioning device.


It is believed that each objection raised in the action has been addressed and that the claims as amended should be viewed as patentable in light of the above-noted rationale.

Applicant believes that no fee is due with this submission, but nevertheless authorizes the Commissioner to debit any required fee from or credit any overpayment to Deposit Account No. 501593, in the name of Borden Ladner Gervais LLP.

It is submitted that this application is in condition for allowance. Early and favorable consideration is respectfully requested

Respectfully submitted,

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